UNITED STATES PATENT AND TRADEMARK OFFICE

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/612,786	07/02/2003	Mari Abe	JP920020093US1	5470

7590 03/07/2006	EXAMINER
Louis P. Herzberg	LUDWIG, MATTHEW J
Intellectual Property Law Dept.	
IBM Corporation	

	ART UNIT	PAPER NUMBER
P.O. Box 218	2178	
Yorktown Heights, NY 10598		

DATE MAILED: 03/07/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

PTO-90C (Rev. 10/03)

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE _3_ MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on _02 July 2003_.

2a)☐ This action is **FINAL**.   2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) _1-22_ is/are pending in the application.

  4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) _1-22_ is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

  Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

  Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

  a)☐ All b)☐ Some * c)☐ None of:

    1.☒ Certified copies of the priority documents have been received.

    2.☐ Certified copies of the priority documents have been received in Application No. _____.

    3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

  * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
  Paper No(s)/Mail Date _____.

4) ☐ Interview Summary (PTO-413)
  Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

DETAILED ACTION

1.   This action is responsive to the application filed 7/2/03. Acknowledgment is made of

applicant's claim for foreign priority under 35 U.S.C. 119(a)-(d). The certified copy has been

filed and received 7/2/03.

2.   Claims 1-22 are pending in the case. Claims 1, 3, 5, 10, 14, and 17, are independent

claims.

Claim Rejections - 35 USC § 101

3.   35 U.S.C. 101 reads as follows:

> Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or
> any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and
> requirements of this title.

4.   **Claims 1-22 are rejected under 35 U.S.C. 101 because the claimed invention is**

directed to non-statutory subject matter.

In reference to claims 1-22, the claims recite a set of mental processes or the manipulation of an

abstract idea. The claimed invention as a whole must accomplish a practical application. That is,

it must produce a "useful, concrete and tangible result." State Street, 149 F.3d at 1373, 47

USPQ2d at 1601-02. However, State Street does not hold that a "useful, concrete and tangible

result" alone, without a machine, is sufficient for statutory subject matter. The purpose of this

requirement is to limit patent protection to inventions that possess a certain level of "real world"

value, as opposed to subject matter that represents nothing more than an idea or concept, or is

simply a starting point for future investigation or research (Brenner v. Manson, 383 U.S. 519,

528-36, 148 USPQ 689, 693-96); In re Ziegler, 992, F.2d 1197, 1200-03, 26 USP2Zd 1600,

1603-06 (Fed. Cir. 1993)). Accordingly, a complete disclosure should contain some indication of

the practical application for the claimed invention, i.e., why the applicant believes the claimed

invention is useful.

Apart from the utility requirement of 35 U.S.C. 101, usefulness under the patent elgibility

standard requires significant functionality to be present to satisfy the useful result aspect of the

practical application requirement. See Arhythmia, 958 F.2d at 1057, 22 USPQ2d at 1036. Merely

claiming nonfunctional descriptive material stored in a computer-readable medium does not

make the invention eligible for patenting. For example, a claim directed to a word processing file

stored on a disk may satisfy the utility requirement of 35 U.S.C. 101 since the information stored

may be some "real world" value. However, the mere fact that the claim may satisfy the utility

requirement of 35 U.S.C. 101 does not mean that a useful result is achieved under the practical

application requirement. The claimed invention as a whole must produce a "useful, concrete, and

tangible" result to have a practical application.

Claim Rejections - 35 USC § 112

5.   The following is a quotation of the first paragraph of 35 U.S.C. 112:

> The specification shall contain a written description of the invention, and of the manner and process of making
> and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it
> pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode
> contemplated by the inventor of carrying out his invention.

6.   **Claims 1, 3, 5, 10, 14, and 17, are rejected under 35 U.S.C. 112, first paragraph, as**

failing to comply with the enablement requirement. The claim(s) contains subject matter

which was not described in the specification in such a way as to enable one skilled in the art

to which it pertains, or with which it is most nearly connected, to make and/or use the

invention.

In reference to independent claim 1, The claim recites "comprising controlling a computer to address at least one predetermined element in a structured document, comprising the steps of: when the structured document having said at least one predetermined element addressed by predetermined addressing information is modified, inputting the structured document". The examiner is unable to distinguish between the use of the word 'addressing' as a verb and the word 'address' as a noun. It fails to provide one of ordinary skill in the art with a proficient means of recreating applicant's invention. Moreover, the phrase 'reading the analysis result from the memory; and updating the addressing information according to the analyzed modification so that the addressing information addresses at least one corresponding element' is vexatious and leaves one of ordinary skill in the art oblivious as to what is doing the reading and addressing.

In reference to independent claim 3, 5, and 14, the phrase 'a second step of reading the operation sequences from the memory and changing operations in the operation sequence that are interpreted as a movement of a component into an operation of moving the component' fails to provide a complete description of the creation of the operation. The operation of moving the component leaves one to wonder how the component is being moved and where the component is being moved to.

In reference to independent claim 10, the claim recites the phrase 'first processing of, when the structured document having the element addressed by predetermined addressing information' fails to distinctly claim the subject matter and would not provide one of ordinary skill in the art with a succinct step to perform the claimed invention. Moreover, the addressing information found in the phrase 'second processing of reading the analysis result from the memory and updating the addressing information according to the analyzed modification so that the

addressing information addresses at least..." is vexatious and leaves one of ordinary skill in the

art with no idea of who or what is reading the information the analysis result and where the result

is being read to.

In reference to independent claim 17, the claim recites the phrase 'difference computation

means for computing, when the HTML/XML document for which the annotation data has been

made is modified, a difference between an unmodified version and a modified version of the

HTML/XML document' includes incomplete thoughts and sentences. It is vexatious in nature

because the steps are not complete. One of ordinary skill in the art would not have a proficient

means of understanding or carrying out applicant's invention based upon the presently claimed

language.

Claim Rejections - 35 USC § 103

7.   The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all

obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in
> section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are
> such that the subject matter as a whole would have been obvious at the time the invention was made to a person
> having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the
> manner in which the invention was made.

8.   **Claims 1-22 are rejected under 35 U.S.C. 103(a) as being unpatentable over Silva et**

al., US 2002/005409 filed 08/2001 in view of Fernandez et al., USPN 6,785,673 filed 12/2001.

In reference to independent claim 1, 5, Silva teaches:

A method of generating robust Xpath expressions and selecting a node in transcodable

markup transcoders (compare to "analyzing a modification and storing the analysis result in

memory"). See Silva, paragraphs 0048, 0034, 0059.

Selecting at least two Xpath expression generation methods each method having a configuration for producing Xpath expressions which uniquely identify nodes in transcodable markup and generating a set of Xpath expressions for the selected node using the furthest selected Xpath expression generation methods (compare to "updating the addressing information according to the analyzed modification so that the addressing information addresses..."). See Silva, paragraphs 0034, 0047, and 0057.

Silva fails to explicitly state the addressing of at least one corresponding element or corresponding elements in the modified structured element; however, Fernandez teaches the use of redundant set of Xpath expressions and an intermediate representation of XML view queries called a view tree has been created that is general enough to express the XML mappings in any of these system. See Fernandez, column 3, lines 38-54.

It would have been obvious to one of ordinary skill in the art at the time the invention was made to include the feature of addressing at least one corresponding element or corresponding elements in the modified structured document because it would have provided the capability for mappings of relational data into XML that conform to arbitrary XML schemas, not just a canonical mapping of the relational schema.

In response to dependent claim 2, Silva teaches:

Resolving each Xpath expression in the set, the resolutions producing a set of candidate nodes; and identifying the selected node from among the set of candidate nodes based upon the Xpath expressions in the set resolving to the selected node more than any other node in the set of candidate nodes. See Silva, paragraphs, 0042, 0048.

In response to independent claim 3, Silva teaches:

Selecting at least two Xpath expressions generation methods from the group consisting of

a tag-specific methodology, an anchoring methodology and a cascading filtering methodology.

See Silva, 0045, 0035, and 0065.

In response to dependent claim 4, Silva teaches:

Selecting at least two Xpath expression generation methods each method having a configuration

for producing Xpath expressions which uniquely identify nodes in transcodable markup and

generating a set of Xpath expressions for the selected node using the furthest selected Xpath

expression generation methods (compare to "updating the addressing information according to

the analyzed modification so that the addressing information addresses..."). See Silva,

paragraphs 0034, 0047, and 0057.

Silva fails to explicitly state the addressing of at least one corresponding element or

corresponding elements in the modified structured element; however, Fernandez teaches the use

of redundant set of Xpath expressions and an intermediate representation of XML view queries

called a view tree has been created that is general enough to express the XML mappings in any

of these system. See Fernandez, column 3, lines 38-54.

It would have been obvious to one of ordinary skill in the art at the time the invention

was made to include the feature of addressing at least one corresponding element or

corresponding elements in the modified structured document because it would have provided the

capability for mappings of relational data into XML that conform to arbitrary XML schemas, not

just a canonical mapping of the relational schema.

In reference to dependent claim 6, Silva teaches:

A set of differing Xpath expression generators Xpath expression; an interface, and an

Xpath generator processor. See Silva, paragraph 0034, 0048, 0067, and 0032.

In reference to dependent claim 7 & 8, Silva teaches:

Generating a set of Xpath expressions for the selected node using the further selected

Xpath expression generation methods. See Silva, paragraphs 0047, 0048, and 0057.

Resolving each Xpath expression in the set, the resolutions producing a set of candidate

nodes; and identifying the selected node from among the set of candidate nodes based upon the

Xpath expressions in the set resolving to the selected node more than any other node in the set of

candidate nodes. See Silva, paragraphs, 0042, 0048.

In reference to dependent claim 9, Silva teaches:

Resolving each Xpath expression in the set, the resolutions producing a set of candidate

nodes; and identifying the selected node from among the set of candidate nodes based upon the

Xpath expressions in the set resolving to the selected node more than any other node in the set of

candidate nodes. See Silva, paragraphs, 0042, 0048.

In reference to claims 10-22, the claims recite similar limitations to those in claims 1-9, and

therefore are rejected under similar rationale.

Conclusion

9.   The prior art made of record and not relied upon is considered pertinent to applicant's
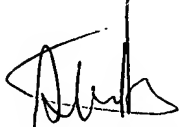
disclosure.

Ito   USPN 6,848,079   filed (5/8/06)

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Matthew J. Ludwig whose telephone number is 571-272-4127. The examiner can normally be reached on 9:00am-6:00pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Stephen Hong can be reached on 571-272-4124. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

ML

March 2, 2006

STEPHEN HONG

ADVISORY PATENT EXAMINER